

**CITY OF HORSESHOE BAY**

**BLASTING ORDINANCE**

**ORDINANCE NO. ORD 07-03-20**

**AN ORDINANCE OF THE CITY OF HORSESHOE BAY, TEXAS, REGULATING BLASTING AND PROVIDING FOR FINDINGS OF FACT; DEFINITIONS; ISSUANCE OF PERMITS AND COLLECTION OF FEES; BOND AND INSURANCE REQUIREMENTS; HOURS OF OPERATION; UTILITY NOTIFICATION; DETONATOR PRECAUTIONS; REGULATORY AND SAFETY COMPLIANCE; POST-BLASTING AND MISFIRE REGULATIONS; STORAGE AND HANDLING OF EXPLOSIVES; MONITORING REQUIREMENTS; AIRBLAST STANDARDS; DEBRIS AND VIBRATION STANDARDS; INSPECTIONS; ENFORCEMENT; CIVIL FINES AND CRIMINAL PENALTIES NOT TO EXCEED \$2,000; SEVERABILITY; REPEALER; EFFECTIVE DATE; AND PROPER NOTICE AND MEETING**

**WHEREAS,** the City Council of the City of Horseshoe Bay (City Council) seeks to provide for the safe and orderly development of property within its corporate limits; and

**WHEREAS,** the City Council seeks to prevent fires and preserve property values; and

**WHEREAS,** the City Council finds that the unregulated use of blasting agents and explosives constitutes a nuisance and threat to the public health, safety and welfare; and

**WHEREAS,** the City Council seeks to protect the citizens of the City of Horseshoe Bay (City) from hazardous substances, materials and devices, and from conditions hazardous to life or property; and

**WHEREAS,** the City Council seeks to protect the air and water quality resources of the City; and

**WHEREAS,** the City Council finds it to be in the best interest of the public to provide for blasting regulations within the City; and

**WHEREAS,** the City Council is authorized to regulate construction and prohibit nuisances pursuant to the City's general police powers and Texas Local Government Code Chapters 51, 54 and 217; and

**WHEREAS,** pursuant to Texas Local Government Code section 342.003, the City Council is authorized to, among other things, regulate the storage of explosive and dangerous materials and adopt rules for the prevention and extinguishment of fires as the City Council deems necessary;

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF HORSESHOE BAY, TEXAS:**

**1. FINDINGS OF FACT**

All of the above premises are hereby found to be true and correct legislative and factual findings of the City Council, and are hereby approved and incorporated into the body of this Ordinance as if copied in their entirety.

**2. BLASTING REGULATIONS**

**A. Scope**

The provisions of this Ordinance shall apply within the City Limits (i.e., incorporated municipal boundary).

**B. Compliance Required**

Unregulated blasting is hereby defined as a nuisance and is prohibited within the City. It shall be unlawful for any person to violate the provisions of this Ordinance. Blasting shall not be conducted within the City Limits without first obtaining a Permit under paragraph 2. D. below.

**C. Definitions**

As used in this Ordinance, the following words shall have the following definitions:

*Blast* shall mean the ignition of an explosive charge for the purpose of separating and displacing in situ rock or earth.

*Blast area* shall mean the area including the blast site and the immediate adjacent area affected by flying rock, missiles and concussion.

*Blasting* shall mean the practice or occupation of breaking up and or extracting heavy masses or rock, or other materials imbedded in the ground, by means of blasting agents or explosives.

*Blasting agent* shall mean a material or mixture consisting of fuel and oxidizer, intended for blasting provided that the finished product, as mixed for use or shipment, cannot be detonated by means of a No. 8 test detonator when unconfined. Blasting agents are labeled and placarded as Class 1.5 materials by US Department of Transportation.

*Blast site* means the area in which explosive materials are being or have been loaded and which includes all holes loaded or to be loaded for the same blast and a distance of 50 feet in all directions.

*Explosive Materials* means a chemical compound, mixture or device, the primary or common purpose of which is to function by explosion. The term includes, but is not limited to, blasting

agent, dynamite, black powder, pellet powder, initiating explosives, detonators, safety fuses, squibs, detonating cord, igniter cord and igniters.

*Regulatory authority* shall mean the City of Horseshoe Bay Public Works Department.

#### **D. Permit Required**

1. It shall be unlawful for any person to engage in any blasting activity or prepare for blasting activity at a blasting site within the City without first applying for and receiving a permit from the regulatory authority. Permits shall be one of the following classes:

*Class A permit:* An instrument indicating approval by the regulatory authority for the use of blasting agents or explosives at the specified location for a period of 30 calendar days from the date of issuance.

*Class B permit:* An instrument indicating approval by the regulatory authority for the use of blasting agents or explosives at the specified location for a period of 120 calendar days from the date of issuance.

*Class C permit:* An instrument indicating approval by the regulatory authority for the use of blasting agents or explosives at the specified location for a period of one year from the date of issuance.

2. Each such blasting permit will authorize blasting for extraction of materials (i.e. rock, stone, etc.) only at the blasting site designated on the permit, and permits are not transferable to other locations or other persons.

3. Permits authorized by this Ordinance shall be issued only upon payment in compliance with the fee schedule set forth below, which may be amended from time to time by city council resolution: Class A, B, and C permits: \$25.00

4. The site operator, or designated representative, may apply for an appropriate permit in accordance with the following procedures:

- a. The applicant shall submit a completed permit application in such form and detail as prescribed by the regulatory authority accompanied by the appropriate fee.
- b. The chief officer of the regulatory authority shall have seven (7) calendar days in which to approve or deny the permit application.
- c. Any party aggrieved by the denial of a permit or inaction by the chief officer of the regulatory authority may file a written appeal to the city council.
- d. The city council shall review the appeal at its next regularly scheduled and posted meeting when the appeal is received prior to the meeting agenda being posted.

#### **E. Investigation Fee**

An investigation shall be made whenever any blasting for which a permit is required by this Ordinance has commenced without first obtaining a permit. An investigation fee shall be collected whether or not a permit is subsequently issued. The payment of such investigation fee

shall not exempt any person from compliance with all other provisions of this Ordinance or from any penalty prescribed by law. The investigation fee shall be equal to the amount of the permit fee required by this Ordinance.

#### **F. Bond or Insurance Required**

1. Before a permit may be issued pursuant to this Ordinance, the applicant must file with the City a public liability insurance policy certificate in the principal sum of one million dollars (\$1,000,000.00) covering personal injury and one million dollars (\$1,000,000.00) covering property damage, for the purpose of payment of damages to persons or property which arise from, or are caused by, any act authorized by the permit upon which a legal judgment results. Public agencies shall be exempt from the bonding or insurance requirements. The permittee shall be solely responsible for any and all damages to persons and property which arise from or are caused by, the conduct of any act authorized by the permit upon which any legal judgment results and the City shall be held harmless from any claim for damages to persons or property.

2. Cancellation, termination or suspension of the insurance or bond required by this Section results in the automatic suspension of all related permits and blasting activities must be immediately discontinued. Permits may be held in suspension for thirty (30) days, after which time they are automatically cancelled and a new permit application must be approved prior to resumption of blasting activities. A permit may be reinstated if proof of reinstatement of the bond or insurance required by this Section is provided within thirty (30) calendar days of suspension of the permit.

#### **G. Hours of Operation**

The hours during which blasting may take place shall be any time during the hours between 8:00 a.m. and 5:00 p.m., Monday through Friday; excluding Federal, State, and City Holidays, unless otherwise approved in writing by the regulatory authority.

#### **H. Notifications**

1. Adjourning property owners within 350 feet of the blasting site shall be notified in writing by the site operator of site operator's reception of a Blasting Permit.

2. Whenever blasting is being conducted in the vicinity of utility lines or rights-of-way, the blaster shall notify the appropriate representatives of the utilities at least 24 hours in advance of blasting, specifying the location and intended time of such blasting. Verbal notices shall be confirmed with written notice. The time limit shall not apply in an emergency situation, if approved by the regulatory authority.

3. Site operators, contractors, or permit holders shall conduct a pre-blast survey on all structures within 350 feet of the blasting area. The survey shall be conducted by a professional engineering firm qualified to do such a survey. The survey shall be done in accordance with current industry standards.

## **I. Detonator Precautions**

1. Precautions shall be taken to prevent accidental discharge of electric detonators from currents induced by radar and radio transmitters, lightning, adjacent power lines, dust and snow storms, or other sources of extraneous electricity.
2. Precautions shall be taken to prevent accidental initiation of nonelectric detonators from stray currents induced by lightning or static electricity.

## **J. Regulatory and Safety Compliance**

1. Blasting operations shall be conducted by approved, competent operators familiar with the required safety precautions and hazards involved. Permit applications will specify the credentials of the operator and will be certified in writing by the operator.
2. Blasting operations shall be performed in accordance with the instructions of the manufacturer of the explosive materials being used.
3. When blasting is done in a congested area or in close proximity to a structure, railway or highway, or any other installation, precautions shall be taken to minimize earth vibrations and air blast effects. Blasting mats or other protective means shall be used to prevent fragments from being thrown beyond the blast area.
4. All blasting activities and the use and storage of explosive materials shall comply with all applicable local, state and federal regulations concerning industrial noise and dust levels as well as applicable drainage, water, air and safety standards.

## **K. Blasting**

1. During the time that holes are being loaded or are loaded with explosive materials, blasting agents or detonators, only authorized persons engaged in drilling and loading operations or otherwise authorized to enter the site shall be allowed at the blast site. The blast site shall be guarded or barricaded and posted. Blast site security shall be maintained until after the post-blast inspection has been completed.
2. Holes drilled for the loading of explosive charges shall be made and loaded in accordance with National Fire Protection Association (NFPA) codes and standards 495 (NFPA 495), and shall not be greater than three and one-half inches (3 ½ inches) in diameter.
3. After loading for a blast is completed and before firing, excess explosive materials shall be removed from the area and returned to the proper storage facilities.
4. The initiation of blasts shall be by means conforming to the provisions of NFPA 495.
5. The blaster shall supervise the connecting of the blastholes and the connection of the loadline to the power source or initiation point. Connections shall be made progressively from the

blasthole back to the initiation point. Blasting lead lines shall remain shunted (shorted) and shall not be connected to the blasting machine or other source of current until the blast is to be fired.

6. No blast shall be fired until the blaster has made certain that all surplus explosive materials are in a safe place and stored in compliance with this Ordinance, all persons and equipment are at a safe distance or under sufficient cover, and that an adequate warning signal has been given.

7. Blasting shall be done in such a manner as to minimize the fracturing of rock beyond the required excavation. Blasting shall be accomplished only by qualified blasting contractors holding blasting licenses or permits from qualified agencies. Any and all damages resulting from blasting shall be repaired by the site operator or contractor at his own expense.

#### **L. Post-Blasting and Misfires**

1. After the blast, the following procedures shall be observed:

- a. No person shall return to the blast area until allowed to do so by the blaster in charge.
- b. The blaster shall allow sufficient time for smoke and fumes to dissipate and for dust to settle before returning to or approaching the blast area.
- c. The blaster shall inspect the entire blast site for misfires before allowing other personnel to return to the blast area.

2. Where a misfire is suspected, all initiating circuits shall be traced and a search made for unexploded charges. Where a misfire is found, the blaster shall provide proper safeguards for excluding all personnel from the blast area. Misfires shall be reported to the person in charge of the blasting and handled under the direction of the person in charge of the blasting operation.

#### **M. Storage**

The Police and Fire Departments will be notified in writing of the location of all storage of explosives within the City limits. Any storage area for explosives shall be clearly marked and identified on the premises and a security fence must be established at a distance of at least twenty-five (25) feet from the containers in which explosive materials are to be stored. The security fence shall be at least eight (8) feet in height and shall be made of chain link or other appropriate material. A lockable eight-foot gate shall be provided for access in and out of the security fence surrounding the storage area. The access gate for the explosives storage area must be kept locked at all times with an appropriate locking device or padlock. No keys to the locking device or padlock, preventing access to the explosives storage area, may be distributed by the site operator to any person other than those employees or subcontractors who have been trained and/or certified in the proper handling, storage, and use of explosive materials. As an alternative to the fencing requirement provided in this section, the site operator may use a solid steel storage container that has a lockable access point and that is capable of containing an accidental discharge or explosion of the explosive agents stored within the container. The storage facility in which explosive materials are stored must be located at least three hundred (300) feet from any adjoining property line or as may be otherwise required by state or federal law.

## **N. Monitoring of Blasting**

Site operators shall be required to perform monitoring of blasting events to accumulate data with respect to the seismographic and airblast effects of the blasting activity as required by federal and state law. Written records shall be maintained by the site operator and be made available for review upon request of the regulatory agency. Site operators shall conduct independent monitoring of blasting events if directed, and to the extent and frequency reasonably required, by the regulatory authority. The information generated in the form of reports or other data from this monitoring must be made available to the chief officer of the regulatory agency within seventy-two (72) hours from receipt by the owner/operator of a written request to review such information. The chief officer of the regulatory authority shall honor and maintain the confidentiality of data submitted by operators and identified as confidential data to the extent allowed by law.

## **O. Airblast Standards**

1. For the purpose of this Ordinance, the air overpressure and related noise generated by the use of explosives in blasting activities shall be measured by the airblast created thereby. Airblast shall not exceed the maximum limits listed below at the location of any structure, vehicle, dwelling, public building, school, church, or community or institutional building outside the permit area, except the maximum airblast standards do not apply at the following locations:
  - a. structures owned by the permittee and not leased to another person;
  - b. structures owned by the permittee and leased to another person, if a written waiver by the lessee has been obtained.

Lower frequency limit of measuring system, in Hz (plus-minus 3 dB)	Maximum level, in dB
0.1 Hz or lower--flat response *	134 peak
2 Hz or lower--flat response	133 peak
6 Hz or lower--flat response	129 peak
C-weighted--slow response *	105 peak dBC

\* Only when approved by the regulatory authority.

2. The operator shall conduct monitoring to ensure compliance with the airblast standards.
3. The measuring systems shall have an upper-end flat-frequency response of at least two hundred (200) Hz.

## **P. Debris and Vibration Standards**

1. Flyrock traveling in the air or along the ground shall not be cast from the blasting site beyond the area under the control of the operator.

2. In all blasting operations ground vibration shall not cause any damage to structures or utilities, except that these vibration standards do not apply to the following locations:
  - a. At structures owned by the permittee and not leased to another person;
  - b. At structures owned by the permittee and leased to another person, if a written waiver by the lessee has been obtained.
3. The maximum ground vibration shall be established in accordance with the maximum peak-particle-velocity limits of 0.5 inches per second.
4. The maximum ground vibration shall not exceed the following limits at the location of any dwelling, public building, school, church, or community or institutional building outside the area under the control of the operator:
  - < 30 Hz 0.5 in/sec. <30 Hz 0.5 in/sec.
  - >30 Hz 1.0 in/sec 31-40 Hz 1.0 in/sec
  - >40 Hz 2.0 in/sec
5. A seismographic record shall be provided for each blast and the site operator shall be responsible for such record and for providing proper instrumentation as specified in this Ordinance. Personnel conducting such monitoring shall be properly trained in the operation for the equipment being used.
6. Exceptions to these provisions may be requested in writing and must include the calculations and criteria certified by a registered soils engineer and or geologist.

#### **Q. Inspections**

The holder of a blasting permit shall make the blasting site available to the regulatory authority for inspection at all times during regular office hours. All records, including monitoring records referenced above, relating to blasting activities will be made available to the regulatory authority during normal office hours within seventy-two (72) hours after such request is made.

### **3. ENFORCEMENT**

#### **A. Enforcement**

The City shall have the power to administer and enforce the provisions of this Ordinance as may be required by governing law. Any person violating any provision of this Ordinance is subject to suit for injunctive relief as well as prosecution for criminal violations. Any violation of this Ordinance is hereby declared to be a nuisance.

#### **B. Criminal Prosecution**

Any person violating any provision of this Ordinance shall, upon conviction, be fined a sum not exceeding two thousand dollars (\$2,000.00), except as may be otherwise expressly provided by state law. Each day that a provision of this Ordinance is violated shall constitute a separate offense. An offense under this Ordinance is a misdemeanor.



### **C. Civil Remedies**

Nothing in this Ordinance shall be construed as preempting or waiving the rights of third parties from instituting any action for remedies against site operators or permittees. Nothing in this Ordinance shall be construed as a waiver of the City's right to bring a civil action to enforce the provisions of this Ordinance and to seek remedies as allowed by law, including, but not limited to the following:

- a. injunctive relief to prevent specific conduct that violates the Ordinance or to require specific conduct that is necessary for compliance with the Ordinance;
- b. a civil penalty up to one thousand dollars (\$1,000.00) a day when it is shown that the defendant was actually notified of the provisions of the Ordinance and after receiving notice committed acts in violation of the Ordinance or failed to take action necessary for compliance with the Ordinance; and
- c. other available relief.

### **4. EFFECTIVE DATE**

This Ordinance shall be and become effective immediately upon and after its passage and publication as may be required by governing law.

### **5. REPEALER**

All ordinances or parts of ordinances in force when the provisions of this Ordinance becomes effective which are inconsistent or in conflict with the terms and provisions contained in this Ordinance are hereby repealed only to the extent of such conflict.

### **6. SEVERABILITY**

Should any part, sentence or phrase of this Ordinance be determined to be unlawful, void or unenforceable, the validity of the remaining portions of this Ordinance shall not be adversely affected. No portion of this Ordinance shall fail or become inoperative by reason of the invalidity of any other part. All provisions of this Ordinance are declared to be severable.

**PASSED AND APPROVED** on this 20th day of March, 2007 by the City Council of the City of Horseshoe Bay, Texas.

**CITY OF HORSESHOE BAY, TEXAS**

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**Robert W. Lambert, Mayor**

**ATTEST:**

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**Toni Vanderburg, City Secretary**